REMARKS

The present invention is directed to compositions and methods effective in inhibiting abnormal or undesirable cell proliferation, particularly endothelial cell proliferation and angiogenesis related to neovascularization and tumor growth. The compositions comprise a naturally occurring or synthetic protein, peptide, or protein fragment containing all or an active portion of the C-terminal portion of proteinase inhibitors such as TFPI.

Claims 1-6, 8, 10-14, 17 and 18 are currently pending. In response to the Office Action dated December 2, 2003 and in order to facilitate prosecution, Claims 1 and 11 are herein amended. No new matter has been added and support for the claims is found in the specification. Applicants submit the following remarks in an effort to address the rejections raised in the Office Action.

Formalities

Applicants appreciate the Patent Office's review and acceptance of the formal drawings and sequence listing.

Rejection of Claims 1-6, 10-14, and 18 under 35 U.S.C. §112, second paragraph

In the December 2, 2003 Office Action, the Examiner rejected Claims 1-6, 10-14, and 18 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More specifically, the Examiner objected to the use of the word "undesireable" stating that it is a relative word.

In an effort to facilitate prosecution, Applicants have herein amended the claims at issue by removing the objectionable term. Accordingly, reconsideration and removal of this rejection is respectfully requested.

Rejection of Claims 1-10 under 35 U.S.C. §112, first paragraph

In the December 2, 2003 Office Action, the Examiner rejected Claims 1-10 under 35 U.S.C. §112, first paragraph, because according to the Examiner, "the specification, while being enabling for treating metastatic tumor in mice, does not reasonable provide enablement for treatment of any angiogenesis-related disease, in particular treating full scope of diseases claimed in Claim 3 and 12." In addition, the Examiner stated that the only *in vivo* example present in the specification addresses the treatment of pulmonary metastatic tumor in mice, that the specific TFPI peptide being used is not identified, that there are no examples of treating any of other disorder conditions, nor is there guidance on the dosage ranges or ways of administration required for successful treatment. The Examiner also stated that the scope of the claims is drawn to a broad genus of diseases having diverse etiologies and it is not clear whether the effect demonstrated for a single example will be [applicable] to other conditions. Applicants respectfully traverse.

With regard to the Examiner's objection concerning enablement for treatment of "any angiogenesis-related disease, in particular treating full scope of diseases claimed in Claim 3 and 12", Applicants respectfully submit that the level of skill in the art is high, and that therefore, one skilled in the art would easily appreciate that the diseases listed in Claim 3 and 12 are related to angiogenesis and that based on the teachings provided in the specification, the claimed invention would be effective in alleviating complications of such diseases.

With regard to the Examiner's concern that the specific peptide being used [in the Examples] is not identified, Applicants respectfully direct the Examiner's attention to lines 1-14 on page 20 of the specification wherein the peptide is identified as that corresponding to SEQ ID NO: 3.

With regard to the Examiner's concern that "there are no examples of treating any of other disorder conditions" Applicants respectfully submit that the level of skill in the art is high, and that therefore, one skilled in the art would correlate the teachings of the specification to other diseases and conditions. In addition, according to MPEP 2164.02, "A

single working example in the specification for a claimed invention is enough to preclude a rejection which states that nothing is enabled since at least that embodiment would be enabled."

In addition, with regard to the Examiner's statement that there is insufficient "guidance on the dosage ranges or ways of administration required for successful treatment". Applicants respectfully direct the Examiner's attention to line 28 of page 24 through line 22 of page 26 of the specification wherein information concerning dosages, formulations and routes of administration is provided.

In conclusion, Applicants submit that the claimed method is described in sufficient detail to enable one of skill in the art to use the claimed method with a reasonable expectation of success. The level of skill in the art is high, doses and formulations are provided as is the presence of working examples. A detailed analysis of the factors for enablement dictated in *In re Wands* 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988) clearly provide enough support that the disclosure satisfies the enablement requirement. The legal standard has been met and accordingly, Applicants request reconsideration and withdrawal of the rejection.

Rejection of Claims 1-18 under 35 U.S.C. §112, first paragraph

In the December 2, 2003 Office Action, the Examiner rejected Claims 1-18 under 35 U.S.C. §112, first paragraph, because according to the Examiner, "the specification, while being enabling for treating metastatic tumor in mice, does not reasonably provide enablement for treatment of any angiogenesis-related disease in other species." The Examiner asserted that "no examples or appropriate animal models are present for treatment of other species (e.g. human)." Applicants respectfully disagree.

It is well recognized by those skilled in the art that the mouse model is an accepted animal model for the assessment of potential cancer therapeutics in other animals including humans. Indeed, experimental data based on mouse experiments have long been submitted

and accepted as predictive of treatment in humans in numerous patent applications, including for example United States Patent Application Serial Number 09/266,543 (recently allowed). Accordingly, Applicants request reconsideration and withdrawal of the present rejection.

Rejection of Claims 1-6, 10-14 and 18 under Judicially Created Doctrine of Obviousness-Type Double Patenting

In the December 2, 2003 Office Action, the Examiner rejected Claims 1-18 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of United States Patent 5,981,471. In an effort to facilitate prosecution, upon removal of the above rejections and allowance of the claims, Applicants will submit a terminal disclaimer in order to address the obviousness-type double patenting rejection.

Conclusion

Applicants respectfully submit that Claims 1-6, 10-14, 17 and 18 are in condition for allowance. Such action is respectfully requested. If the Examiner believes any informalities remain in the application which may be corrected by Examiner's Amendment, or there are any other issues which can be resolved by telephone interview, a telephone call to the undersigned attorney at (404) 745-2463 is respectfully solicited.

Respectfully submitted,

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